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ABSTRACT

This cross-cultural study evaluated the effects of nontraditional versus traditional educational approaches in kindergarten on children's preparation for first grade and their readiness to learn. Fifty children in a developmental kindergarten in Pennsylvania, and 50 children in a traditional academic kindergarten in Sichuan province, People's Republic of China, were studied. Through interviews with children, parents, and school officials, and through classroom observation, information about schools, parental involvement, and children's viewpoints about school and learning were obtained. Observations and interviews revealed that the two programs' activities and philosophies differed considerably and that the children, parents, and teachers expressed different attitudes about learning. The U.S. program had shorter hours, used a wider variety of activities, and was less interested in academics than the Chinese program. The U.S. program emphasized the development of social maturity, while the highly-structured Chinese program emphasized academic adjustment, classroom discipline, and pupil safety. The children in the U.S. program had a broader, more dynamic definition of learning, were more critical of school, and had more time to play than children in the Chinese program. These results suggest that these children may have difficulty adjusting to an academic first grade. The study concludes that the Chinese kindergarten, which stressed an academic program, is consistent with later schooling and learning, and prepares children for an academic first grade. (TM)

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Two Kindergarten Programs and Children's Perceptions of School

-- A Cross-cultural Study[1]

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Abstract:

Data were collected through a multiple forms of inquiry, from a sample of 100 children and their parents, teachers and school principals between October 1992 and July 1993. Half of the children were in attendance at a developmental kindergarten program in Pennsylvania of the United States, and the other half were in an academic kindergarten program in Sichuan province of the People's Republic of China.

An analysis of the data revealed differences in school activities, educational philosophies and job priorities of teachers and principals, parental involvement, and more importantly, children's knowledge of first grade, and their perceptions of school and learning. We found that children from the American developmental program seem to have a broader and more dynamic definition of learning, and children prepared by the highly structured Chinese program appear to be more ready to engage in an academic program in the first grade than are their American counterparts. This study also found that children in both programs have positive feelings toward school and school activities.

1. Introduction

The first, among a number of national goals for education is: by the year 2000, all children in the U.S. will start school ready to learn. While there may be different criteria for the definition of children's readiness, we believe that children's views, their perception of school and learning, can be a major indicator of their school readiness. Yet, this area has not received adequate attention.

According to Bowman (1993), the American academic community now tends to agree that a good approach to child education is through the utilization of a nontraditional approach or

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"developmentally appropriate practices." But, we do not yet know how this approach affects children over either the short term or long term. In the short term, are children who are exposed to the nontraditional approach, better prepared for first grade, and are they ready or more ready to learn than children exposed to a traditional academic kindergarten program? In order to facilitate a fair comparison, we conducted a cross-cultural study focusing on two disparate educational environments: a developmental kindergarten program in the United States and a traditional/academic kindergarten program in the People's Republic of China (China).

In the arena of cross-cultural study, Stevenson and his coworkers (1982, 1985, 1987a, 1987b, 1987c, 1990) have conducted some well-known studies focusing on the comparison of academic achievement among American, Chinese, and Japanese children. Their study utilized specially designed achievement tests administered to a group of first and fifth grade elementary school students. Our study focuses on kindergarten children's readiness for school/learning and the transition process which takes place in advancement from kindergarten to first grade. Through conducting interviews with the children and observations of their classrooms, we examined not only the components of the kindergarten process but the program activities, educational philosophy of the teachers and school administrators, parents' involvement, and children's viewpoints regarding school activity, their perceptions of school and learning. Results of studies of this nature were not readily available in the past.

2. Research Methodology

This study employed multiple forms of inquiry. Methods used for data collection included: a) open-end questionnaire interviews with individual children, teachers, and school principals at each school; b) telephone interviews with all of the American parents; c) family visits and interviews with all of the Chinese parents; and d) site (school) visits and classroom observations both in the U.S. and China.

Data were collected between October 1992 and July 1993, from two groups, each composed of 50 kindergarten children, their parents, their teachers, and school principals. The children attended two public elementary schools of vastly dissimilar cultural backgrounds. One school is located in the U.S - the state of Pennsylvania, the other is in the Sichuan Province of the People's Republic of China. The American elementary school was chosen because its kindergarten program uses the developmentally appropriate approach which emphasizes children's developmental needs. The school is located in a "typical" American neighborhood, serving working and middle/lower-middle class Caucasian families. The Chinese school was selected as a school comparable to the one in the U.S with its pupils coming from working/middle class Chinese families. Its kindergarten program is a typical traditional (Chinese) academic program.

3. Findings and Discussions

1) Program differences (See Table 1.)

While the two academic programs have a similar goal which focuses on preparing children for the first grade and beyond, their tactics and approaches are quite different. The American program emphasizes the development of children's social maturity, while the Chinese program focuses on children's adjustment for school and for formal learning. Differences become evident when considering the number of hours the two groups of kindergarten children spend in an academic setting per week. The American academic program lasts less than three hours a day, five days a week. In contrast, the Chinese program lasts about six hours each day, six days a week. One might assume that children who spend fewer hours at school would be more interested in school activities than children who spend more hours at school. However, this did not seem to be the case with the two groups of children as we discovered that most children in either program held positive feelings toward school activities and the school.

The American classroom is bigger and is equipped with toilet facilities, yet, it holds less

than half the number of children as the Chinese classroom. In our classroom observations, we saw most children in the American program participating actively in the activities, moving frequently from one part of the classroom to another to work on different projects, with very few disciplinary problems occurring. In the Chinese classroom, desks and chairs were positioned very close together in a row. There was very little room between the desks at each end of each row and the classroom walls. Children in the Chinese program remained in their seats for an entire 40-minute class period. Unlike American students, they concentrated and cooperated well for only about half of the class time. The teacher spent a lot of time reminding and educating children about classroom discipline and rules. Behavior/discipline training is considered by both Chinese teachers and Chinese parents as an important part of the kindergarten program. Many Chinese parents expressed their belief that the purpose of a kindergarten program is to "get youngsters used to sitting still for class," otherwise "how can they start first grade."

Table 1. Program Differences

Category	The American Program	The Chinese Program
Criteria for Admission and Class Assignment	5yr of age; child's level of social maturity based on results of a developmental test administered one month before school starts.[1]	5yr-6yr of age; randomly assigned to each class.
Class Size	23 - 25.	55 - 60.
School Hours	Half day, 5 days per week.	Full day, 6 days per week.
Teaching Activities	Continuous schedule. Language and math are combined and taught by one teacher. Teaching is organized through activities such as centers and projects in informal settings.	Structured schedule: 40-minutes per class with a 10-minutes recess between classes; 3 classes in the morning and 2 classes in the afternoon -- lunch at home. Language and math are separately taught by language and math teachers. Teaching is through lecturing in a formal setting.
Learning Activities	Children spend most of their time engaging in often self-directed, group or individual activities such as coloring, building things and playing.	Children spend most of their time listening to the teacher and doing school work such as reading aloud together, practicing hand-writing and elementary arithmetic.
End Year Test	A readiness test is administered. The test score and the recommendation from the teacher result in the school decision of whether the child should move to 1st grade. Social maturity is the primary criterion. About 1/3 of the children spend two years in the kindergarten program.	No test is administered. All children move to 1st grade.

[1] The 50 American children in our study came evenly from 4 classes of the kindergarten program.

2) Differences in task priorities of the teachers and school principals of the two programs.

Table 2. Differences between Teachers and School Principals of the Two Programs

Category	American Teachers/Principal	Chinese Teachers/Principal
Educational background	College ed.+ graduate credits, state teaching certificate.	Junior high + three-yr teachers' training, or senior high + 1yr teachers' training.
Self-perceived most important quality for kindergarten teachers	Caring for children, patience to listen to and understand children.	Being responsible, loving children, and the ability to lead children.
Tasks teachers spent most of their time and energy on	Planning, preparing, and organizing activities.	Educating children about discipline, and ensuring physical safety.
Most important skills for children to develop during kindergarten year	Good self-image/esteem, social skills such as good listening and asking for help, respecting others and being independent.	Getting used to school routines, developing intellectual interests and good study habits.
Job priority of the principal	Children and their concerns: curriculum-wise and behavior-wise; the social and emotional well being of every child and staff member.	Making sure that all the instructions from the district education committee get carried out, and the teachers do their jobs right.

In the developmental program, a teacher has to provide a variety of activities appealing to children. The teacher must possess considerable knowledge of developmental sequences and the ability to design curricula. American teachers appear to be more qualified for such a program with their higher education training. It also seems, that with the task priorities given by American teachers and the principal, children in the American program can benefit more psychologically and emotionally.

In the traditional program, a teacher leads and controls the teaching and learning activities.

In the Chinese context, a teacher has to control about 60 children among whom 94% are the only child in the family - a reality of the one-child-per-family policy of the Chinese government. No wonder that Chinese teachers put discipline and physical safety of children as job priorities. Since the Chinese education system is controlled by the central government, it is essential for the school to carry out instructions from above, in order to meet the standards set by the government, and to prepare its students for any district or national test.

3) Differences between the two parent groups (See Table 3.)

On average, this study found American parents have more education than their Chinese counterparts. The study also noted that close to half of American mothers were homemakers while almost all Chinese mothers worked outside of their homes. In terms of parenting styles, most American parents reported doing things together with their children, while only about 10% of Chinese parents reported doing so. Two-thirds of Chinese parents reported using a combination of lecturing/reasoning and physical punishment - acceptable in the Chinese culture, to educate their children.

As the American kindergarten program is a half day one, it is not surprising that American parents spent more time with their children. It is surprising, though, that Chinese parents were found to be less knowledgeable about their children's school activities. This may be attributable to the Chinese tradition that school and teachers are considered authorities on education, and parents normally do not question what is going on at the school. This is partially reflected in the answers of one third of the Chinese parents that "school should take the primary responsibility" in their child's education.

Table 3. Differences Between the Two Parent Groups

Category	American Parents	Chinese Parents
Years of Education	Average of 13.5 yrs.	Average of 10 years.
Time[1] around their children	Average of 7.5 hours per day.	Average of 4.5 hours per day.
Preparation for kindergarten	About 44% of parents taught their children the alphabet, words and simple math before school started.	82% of parents prepared their children with a vocabulary of up to 300 words, counting up to 200, and/or simple math with up to 2-digit numbers.
Knowledge of school activities	About 42% of parents had a good knowledge; the rest knew some of the school activities.	About 10% had a good knowledge; 76% knew some; 14% knew little.
Who (school/parent) should take the primary responsibility in child's education	About half believed school and parents should share equal responsibility; 20% felt parents should take more responsibility.	Half believed school and parents should share equal responsibility; 32% felt school should take more responsibility.
Help with homework	85% checked homework and explained things; 10% only checked homework.	54% checked homework and explained things; 14% only checked homework;
Expectations	55% of parents wanted their child to be "well educated," or "go to college." Yet, "to do what the child enjoys doing" and "be happy" were the common comments.	60% of parents desired "more education," and to "go to college and/or beyond" for their child. "Be useful," or "let's wait and see" were expressed by the other parents.

[1]. This is based on the time at least one parent spent with the child.

The pressure for academic success remains very high in Chinese society. Parents more or less compete in preparing their children academically for school. A majority Chinese parents gave their children a "head start" in vocabulary and math before the child started the kindergarten

program. In addition, about 90% of Chinese parents assigned homework and/or provided special training such as drawing, calligraphy, music instruments, or chess classes, to their child(ren) during the kindergarten program.

4) Differences in children's perceptions of school (See Table 4.)

It is interesting that despite the highly structured Chinese program, only 4% of Chinese children did not like their school activities, yet, 28% of American children were critical about their school activities. We wonder what these percentages would be if children of both programs had been exposed to each other's school activities.

Another interesting phenomenon we observed is - the more play children have the more play they may desire. Besides a full day, six-day a week school schedule of mostly structured classes, most Chinese children (92%) also spent time studying at home, often, doing assignments for their parents. Compared to their American counterparts, they have much less time to play both inside and outside of school, yet, only 8% expressed a desire to have more play time. American children go to school no more than three hours a day, five days a week. They have more play activities both in and outside of school, yet, more of them (32%) desire more play. The major reason of the two American children who felt "sad about school" was: "not playing long enough."

About two-thirds of American children went to preschool for an average of 1.8 years, while all Chinese children had an average of 3 years' preschool education. Knowing that most preschools in China are boarding schools, Chinese children may have started their kindergarten program more used to separation. This may explain why fewer Chinese children felt sad about being away from home.

Table 4. Differences among Children of the Two Programs

Category	American Children	Chinese Children
Things they like about school	64%: school activities; 30%: social, friends.	56%: school activities; 14%: social, friends.
Things they don't like about school	28%: school activities; 44%: social reasons - "people hit each other" ...	4%: school activities; 60%: social reasons - "people hit each other"...
Things they would like to do at school	14%: more study; 32%: more play, more free time.	14%: more study; 8%: more play, more free time.
Why go to school	68%: to learn	40%: to learn; 26%: like school.
Feelings about their teacher	92%: good; 4%: OK; 2%: bad.	92%: good; 8%: OK.
Things they like about their teacher	16%: academic related; 62%: social-emotional reasons.	62%: academic related; 20%: social-emotional reasons.
Things they don't like about their teacher	36%: nothing; 46%: social-emotional reasons.	72%: nothing; 12%: social-emotional reasons.
Things they would like teacher to help	56%: learning; 28%: care.	28%: learning; 38%: care.
Things a good teacher should do	14%: academic related; 58%: care.	32%: academic related; 24%: care.
Feelings for being away from home	38%: good; 10%: OK; 28%: sad.	80%: good; 8%: OK; 8%: sad.
Overall feelings about school and reasons	96%: good-"I am happy", "it's fun." 4%: sad-"not play long enough."	100%: good-"I can learn things," "there are more kids to play at school."
Perception of school	58%: a place "to learn," to "do stuff"; 30%: a place "it's fun," "you play."	80%: a place to "learn things," to "take classes" and to play "after classes";
Knowledge of 1st grade	34%: "tough," "lots of homework"; 24%: "just as fun."	68%: "you learn more," "more difficult school work"; 20%: "similar to kindergarten."

Another background difference is that over 90% of American children came from a family that had two or more children, but 94% of Chinese children were the only child in their family. Lacking a "playmate" at home may have contributed to Chinese children's good feelings toward school where, "there are more kids to play with."

The major difference between the two groups seems to lie on the "weight" of academics. While most American children and all Chinese children had positive feelings toward school, we found their reasons for such feelings were quite different. American children focused more on being "happy" and having "fun" at school, while Chinese children often pointed out "I can learn" first, then mentioned "more kids to play with." In commenting on things they liked about their teacher and their definition of a good teacher, similar differences were also observed. A larger proportion of Chinese children commented on academic matters such as "she teaches well," while more American children focused on social-emotional matters such as "nice to kids," "taking me to the nurse"...

Children's perceptions of school and learning indicate some more subtle differences. While "a place to learn" was the most common description about school, American children seem to have a more dynamic definition about learning. Their learning included "doing stuff," "working on projects," "playing centers,"... all activities that were of interest to them, and they perceived school as a place to learn to "**do** things" and to "have fun." Chinese children, on the other hand, referred to learning as learning book knowledge, as to "read," to "write" and to "take classes," or what the teacher "teaches you."

Regarding their knowledge about first grade, we found that among American children, 38% had little knowledge about first grade, 24% anticipated first grade to be "just fun," and another 34% described first grade as "lots of homework" and felt nervous about it. Chinese children appeared to have more concrete knowledge about first grade. They knew in first grade they would have classes and hours similar to what they had during their kindergarten year, so first

grade would be "similar to kindergarten." Many Chinese children specified the difference as, "the spelling, the words you learn in first grade are more difficult," "you learn more, besides, first graders have homework from the teachers and clean their classroom themselves"... Few expressed nervous feelings about first grade. The retention and no retention practices of the two programs may have contributed to differences in children's knowledge and motivation about first grade. During our interview, we noticed that American children who were not sure they would go to first grade cared less about first grade, while every child in the Chinese program was enthusiastic when talking about first grade, because each one knows he/she will move to first grade.

4. Concluding Remarks and Implications

There are some limitations to this study as far as some methodological issues such as the limited sample size of children and parents, teachers and school principals from two kindergarten programs in two countries -- this study serves more accurately as a pilot project. Methodological controls are difficult to establish, although we were very careful to seek out schools we considered to be as comparable as possible. For American participants, we could only include children who had written permission from their parents to be interviewed, and in this sense, this group of American children is a "self-selected" sample. This was not the case for the Chinese children. All that was needed was the school administrator's cooperation, as long as the principal agreed to participate, we could interview all the children and parents. The Chinese school is also probably more representative of all the kindergarten programs in China than the American school is representative of all kindergarten programs in the U.S., because Chinese schools are relatively homogenous in program as a result of central government control. Nevertheless, the data we obtained are rich and rewarding and do give us some insight into the differences between the kindergarten environments and family involvement in school in the two societies. Our findings

provide a chance to begin the process of cultural comparison between two very different approaches to early childhood education.

Let us examine the Chinese program first. The traditional/academic approach apparently ignores children's individual and developmental needs. Children are expected to sit passively in the classroom and absorb what the teacher says. The highly structured program trains children mostly for self control of behavior and diligent study habits. Such an approach may discourage children from developing a sense of freedom to explore and to seek alternative routes to solving problems. In the short term, however, the program prepares children for subsequent schooling since the kindergarten is consistent with the current school/learning system. Observations of Chinese children in their classrooms and children's knowledge about first grade suggested that, Chinese children are more ready to engage in an academic program in the first grade than are their American counterparts.

In contrast with the Chinese program, the developmental approach of the American program strives to meet individual needs. Children are better understood and more actively involved in school activities. Children from this program seem to have a broader and more dynamic definition of learning. A long-term effect on children's ways of learning and thinking may lead to subsequent autonomy and exploratory behavior provided the schools continue to provide such developmentally appropriate practices in first grade and beyond to assure children's smooth transition. Unfortunately, the first grade (and beyond) in most of today's schools still involves largely structured teaching and formal learning. A gap between a developmental kindergarten program and academic elementary grades exists. Therefore, children prepared by a developmental kindergarten program may have difficulty adjusting to an academic first grade.

What have we learned from studying these two kindergarten programs in two cultures? It seems clear that each school experience expresses values endemic to that culture. The Chinese

schools prepare children for their future educational experiences and in that sense are culturally appropriate although not in the American sense of being developmentally appropriate. So too for the American school, the kindergarten fits American notions of school for young children with generally a minimal interest in academics. The American school is variable since there is no central control so wide variations in programs might exist. However, the variations in the American system are generally within the parameters of the American cultural norm. In effect each culture offers its citizens the school appropriate to its culture. Before we think of adopting practices from one society to another we have to address the questions of appropriateness and also feasibility of change. Educational change poses some real challenges - how is change possible unless each culture is able to find points of contact which are compatible. The future will bode well if ideas about education are shared and adopted on the bases of their proven effectiveness, and cultural conflicts are avoided.

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